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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/722,362	1	11/26/2003	Christian Boettcher	15540-017001 / 18.00246;	4747
26171	7590	04/19/2005		EXAMINER	
FISH & RICHARDSON P.C.				CHERRY, EUNCHA P	
1425 K STREET, N.W. 11TH FLOOR				ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005-3500				2872	
	•			DATE MAILED: 04/19/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Paper No(s)/Mail Date _

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Paper No(s)/Mail Date. ___

6) [_] Other: _

5) Notice of Informal Patent Application (PTO-152)

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler et al (US Patent No. 6,425,671 B1).

Regarding claims 1-5, 8-13, 16 and 17, Adler et al discloses a deformable mirror comprising a reflecting surface (Fig. 2) disposed on a diaphragm (2), a diaphragm carrier that supports the diaphragm (4), wherein the diaphragm carrier defines non-circular, pressurizable rear surface of the diaphragm (Fig. 4), wherein the diaphragm carrier comprises a lateral recess substantially parallel to the reflecting surface and adjacent to the rear surface of the diaphragm (see Fig. 2), further comprising an actuator (9) and wherein the diaphragm carrier comprises a pipe socket with the circular outer cross-section (see Fig. 4). However, Adler et al does not disclose the rear surface that is approximately rectangular surface,

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approximately oval surface or approximately elliptical surface. It would have been obvious to one of ordinary skill in the art to change the shape of the rear surface since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. In re Daily, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

3. Claims 6, 7, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adler et al in view of Giesen et al (from IDS).

Adler et al discloses the claimed invention as set forth except for actuator is the cooling fluid that is in contact with the rear surface of the diaphragm. Giesen et al discloses the actuator including the cooling fluid that is in contact with the rear surface of the diaphragm (see column 2). It would have been obvious to one of ordinary skill in the art to use cooling fluid instead of spring because the fluid is easier controlling than spring.

Response to Arguments

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4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P.

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CHERRY whose telephone number is 571-272-2310. The examiner can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DREW DUNN can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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